

REMARKS

Upon entry of the present Amendment-A the claims in the application are claims 1- 8, of which claims 1 and 5 are independent.

In the above amendments, claim 1 is amended to change the language "can be to --is--; while new claims 2-4 are added which further defines aspects of the cut-off device of claim 1 and claims 5-8 are added which are similar to claims 1-4, but define a control for an engine. The specification has been amended to overcome minor informalities and inconsistencies therein.

Applicant respectfully submits that all of the amendments presented are fully supported by the original disclosure, including the original claims, the discussion at page 5 of the specification and Figs. 1-3. Applicant also respectfully submits that no impermissible "new matter" is added by the above amendments.

Art-Based Rejection

1. Claim 1 has been rejected under 35 USC 103(a) as being unpatentable over Ryberg (5,441,025). In his rejection, the Examiner states that Ryberg shows a fuel cut-off device for an engine wherein a normally-open type solenoid valve is adapted to block a fuel passage in a carburetor during energization of the solenoid valve, including an engine control switch adapted to be operated to a turned-off position in which an engine ignition device is brought into an inoperative state, and a turned-on position in which the engine ignition device is brought into an operative state, wherein output is supplied to the solenoid valve in the turned-off position of the engine control switch. The Examiner further states that although Ryberg does not specifically show the source of electricity comes from a generator, it is the Examiner's view that the source of electricity is an *obvious choice of design*. In addition, although Ryberg does not disclose a source

of energy supplied to an electric load when in the turned-on position, the Examiner states that it is *inherent* that the source of energy is supplied to an electric load when in the turned-on position.

Applicant's Response

Upon careful consideration applicant respectfully traverses such rejection, and submits that claim 1 is clearly patentably distinct over the Ryberg reference, because Ryberg's system does not disclose or in any way suggest features set forth in claim 1 or the significant advantages achieved thereby.

Ryberg discloses an electromagnetic device 10 for starting and stopping *diesel* engines, including an electromagnet 11 which drives a rod 12. Rod 12 actuates a double lever 3, which is in turn connected to a shaft 2 extending from a fuel injection pump 1. The position of shaft 2 determines an increase or decrease in the flow of fuel from the injection pump to the engine cylinders. However, Ryberg does not disclose or suggest the features of the applicant's invention as recited in claim 1, and it is respectfully submitted that such features are clearly not matters of obvious design choice and are not inherent in view of the Ryberg disclosure.

Ryberg's invention is directed to control of diesel engines which do not require a carburetor. This is further substantiated by Ryberg's disclosure which never mentions a carburetor, and instead discloses that a solenoid 10 that actuates a shaft 2 (via rod 12 and lever 3) connected directly to a fuel injection pump 1. Thus, contrary to the Examiner's remarks, Ryberg does not disclose a solenoid valve within a carburetor, as recited in claim 1.

In addition, although Ryberg discloses an assembly that controls fuel flow using an electromagnet, he does not disclose a solenoid valve adapted to block a fuel passage, as recited in claim 1. Rather, Ryberg declines to describe the specifics of how the fuel is adjusted, saying that

that aspect is not crucial to his invention. Instead, shaft 2 is referred to as acting on means which control the fuel flow within the fuel pump (column 2, lines 14-22).

Furthermore, Ryberg does not disclose the power source or control means for operation of the electromagnet 11, and thus does not specifically disclose an engine control switch constructed to supply the output from said one generating coil, together with the outputs from the other generating coils, to an electric load when in the turned-on position of the switch.

In this regard, applicant respectfully disagrees with the Examiner's allegation that the source of the source of electricity is merely a choice of design, since the applicant's invention is specifically directed to an assembly which interconnects the plural generating coils of a generator, a solenoid valve within a carburetor driven by one of the plural generating coils, and an engine control switch in a uniquely advantageous manner, contrary to conventional practice. It is respectfully submitted that the evidence of record does not support the Examiner's allegation.

Moreover, applicant respectfully, but strongly disagrees with the Examiner's allegation that a hypothetical modification of Ryberg's device including a coil for supplying power to the electromagnet 11 would inherently also use such coil for supplying power to an electric load when in the turned-on position, such as required by claim 1, because such allegation is *directly contradicted* by the evidence of record, i.e., Japanese Utility Model Application Laid-open No. 60-175841, as discussed in the background section of the present application. This feature is a primary aspect of the present invention, and a very significant advantage/improvement in the art, and is in no way rendered obvious by the Ryberg disclosure.

It is noted, for example, that the claimed features are not possible if the solenoid is powered with a battery, whereas the Examiner has not established that such features are obvious in engines that are powered by a generator.

Based on the foregoing, it is respectfully submitted that the Examiner has not established prima facie obviousness of the subject matter of this claim under 35 USC 103(a). Accordingly, it is respectfully requested that the rejection based on the Ryberg reference be reconsidered and withdrawn.

Other Matters

The additional references cited by the Examiner, as listed on the form PTO-892 included with the Office Action, have been considered by applicant. It is respectfully submitted, however, that these additional references fail to overcome the deficiencies of the Ryberg reference as discussed above in relation to the present claim 1.

New claims 2-8 are believed to be allowable over the references of record based on the foregoing arguments concerning the merits of claim 1, and on the merits of the additional features set forth in these new claims.

Conclusion

In conclusion, applicant has overcome the Examiner's rejection as presented in the Office Action; and moreover, applicant has considered all of the references of record, and it is respectfully submitted that the invention as defined by each of the present claims is clearly patentably distinct thereover.

The application is now believed to be in condition for allowance, and a notice to this

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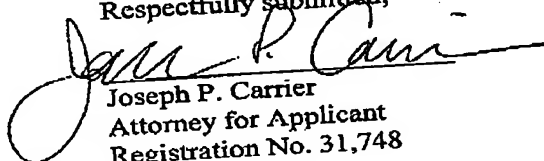
effect is earnestly solicited.

If the Examiner is not fully convinced of all of the claims now in the application, applicant respectfully requests that the Examiner telephonically contact applicant's undersigned representative to expeditiously resolve prosecution of the application.

Favorable reconsideration is respectfully requested.

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CERTIFICATE OF TRANSMISSION

I hereby certify that this correspondence is being transmitted via facsimile to the US Patent & Trademark Office, Art Unit 3747, on 04 October 2004.
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